

TASK ORDER

Project: Evaluation of Liquid Biosolids Storage Tanks

Task Order No: **4**

Issued To: Wessler Engineering

All work shall be performed in accordance with the Agreement between the Board of Public Works and Safety, City of West Lafayette, Indiana and Wessler Engineering executed August 2, 2010.

I. Project Description

A Preliminary Biosolids Dewatering Study was completed in March 2011 that provided a cursory feasibility evaluation of three alternatives: dewatering/storage/land application utilizing (1) centrifuge dewatering; (2) rotary press dewatering; and (3) the current practice of liquid sludge storage/land application. The Dewatering Study concluded the current practice of liquid sludge storage and land application as the cost-effective alternative. Due to an interest in replacing the existing biosolids storage lagoon with liquid storage tanks, this Study will evaluate the improvements needed and preliminary cost opinion for installing liquid storage tanks.

II. Scope of Services – Basic Services

- A. Evaluate the installation of liquid biosolids storage tanks at the pending 10.5 MGD and anticipated future 12.0 MGD WWTP capacities. Information from the March 2011 Dewatering Study will be utilized where practical.
- B. Owner to provide operational information necessary for the evaluation, including but not limited to digested sludge volume and characteristics, electrical power costs, polymer costs, liquid sludge hauling costs, and land application costs.
- C. Prepare preliminary cost opinions for capital improvements for installing liquid biosolids storage tanks including equipment, structures, buildings, piping, electrical, instrumentation, and related physical improvements. For this Study only glass-lined steel storage tanks will be evaluated.
- D. Evaluate (1) installing covers on the storage tanks and (2) an odor control system for venting the tanks/covers. Prepare preliminary cost opinions for these alternative capital improvements and list as separate, additional alternatives.
- E. Identify O&M considerations that differ or may be more involved than the current requirements associated with the biosolids storage lagoon. For O&M requirements that may be more involved than current, include cost opinions for additional O&M costs (beyond current) for estimated electrical/power requirements, polymer usage, labor requirements, and maintenance.

- F. Summarize findings and submit to Owner in a letter report as an amendment to the March 2011 Preliminary Biosolids Dewatering Feasibility Study.
- G. The Report is anticipated to include a basic proposed site plan of the tank layout, basic conceptual design criteria, and an anticipated project schedule. It will not include schematic layouts, sketches, exhibits, design summaries, or flow diagrams.

III. Probable Project Schedule

Submit draft report for Owner review six (6) weeks from authorization. Submit final report two (2) weeks after receipt of Owner review comments.

IV. Compensation

Compensation for Basic Services as defined in Article II shall be \$0.00 (no cost).

V. Project Staff

The anticipated Project Staff is listed below:

Principal Engineer	Martin Wessler, P.E.
Senior Project Manager	Gary Ruston, P.E.
Project Engineer	Charity Dudley, P.E.
Electrical/I&C Engineer	Wayne Moore, P.E.

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Accepted By:

WESSLER ENGINEERING, INC.

Martin A. Wessler, P.E.
CEO

Attest: _____
Gary L. Ruston, P.E.
Senior Project Manager

Date: _____, 2012

| ADDRESS FOR GIVING NOTICE:

Wessler Engineering
6219 S. East Street
Indianapolis, IN 46227

Authorized By:

BOARD OF PUBLIC WORKS & SAFETY
CITY OF WEST LAFAYETTE, INDIANA

John R. Dennis, Mayor

Sana G. Booker, Member

Bradley W. Marley, Member

Jonathan C. Speaker, Member

Elizabeth M. Stull, Member

Attest: _____
Judith C. Rhodes IAMC/CMC/CPFA
Clerk-Treasurer

Date: _____, 2012

ADDRESS FOR GIVING NOTICE:

City of West Lafayette
609 West Navajo Street
West Lafayette, Indiana 47906